



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0045; Product Identifier 2018-CE-027-AD; Amendment 39-21199; AD 2020-16-15]

RIN 2120-AA64

Airworthiness Directives; Viking Air Limited Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Viking Air Limited Models DHC-2 Mk. I and DHC-2 Mk. III airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks reported on the forward and aft float strut wire pull fittings. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0045; or in person at Docket Operations, U.S. Department of Transportation, Docket

Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

For service information identified in this AD, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; telephone: (North America) (800) 663-8444; fax: (250) 656-0673; email: technical.support@vikingair.com; internet: <https://www.vikingair.com/support/service-bulletins>. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for Docket No. FAA-2019-0045.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0045; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the notice of proposed rulemaking (NPRM), the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: (516) 287-7329; fax: (516) 794-5531; email: aziz.ahmed@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued an NPRM to amend 14 CFR part 39 by adding an AD that would apply to Viking Air Limited Models DHC-2 Mk. I and DHC-2 Mk. III airplanes. The NPRM published in the *Federal Register* on February 11, 2019 (84 FR 3131). The

NPRM proposed to correct an unsafe condition for the specified products and was based on AD Number CF-2018-10, dated April 18, 2018 (referred to after this as “the MCAI”), issued by Transport Canada, which is the aviation authority for Canada. The MCAI states:

Cracks have been reported on the Forward and Aft float strut wire pull fittings on DHC-2 Mk. I aeroplanes equipped with the 5600 lb gross weight increase kit installed in accordance with STC SA92-63 or SA00299NY and on DHC-2 Mk. III aeroplanes equipped with the 6000 lb gross weight increase kit installed in accordance with STC SA91-18 or SA945NE. An investigation found that the forward and aft wire pull fittings (P/N VALTBS1245-1/-2 and P/N VALTBS1244-1, respectively) are prone to stress corrosion cracking at low cycles/hours.

Failure of these wire pull fittings will reduce the strength of the float undercarriage below the required structural capability and could result in a failure of the undercarriage causing the aeroplane to tip over and be submerged.

Therefore this [Transport Canada] AD requires that the forward and aft wire pull fittings be replaced with P/N VALTBS1245-3/-4 and P/N VALTBS1244-3/-4 (LH/RH) fittings respectively. These fittings are geometrically similar to the legacy fittings and are made of a different aluminum alloy that is less susceptible to stress corrosion cracking.

In addition to replacing the fittings, it is necessary to implement a recurring visual inspection of the fittings to assure continuing airworthiness.

The MCAI can be found in the AD docket on the internet at:

<https://www.regulations.gov/docket?D=FAA-2019-0045>.

Comments

The FAA gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA’s response.

Request to Remove the Repetitive Inspection

Christopher Campbell requested the FAA remove the 110-hour repetitive inspection requirement. The commenter stated the unsafe condition is eliminated by the requirement to replace the affected part. Also, the commenter reasoned that because

repetitive inspections are already required at each 100-hour and annual inspection by Appendix D to Part 43, Advisory Circular (AC) 43.13, AC 20-106, the manufacturer's maintenance manual, and the float manufacturer's inspection requirements, the repetitive inspections in the NPRM are unnecessary and burdensome. The commenter stated that if the replacement wire pulls are not strong enough to last 110 hours without cracking, then the FAA should address this at the manufacturing level and not in the field.

The FAA does not agree. Although 14 CFR 43.15 and Appendix D to Part 43 do require that 100-hour and annual inspections include an inspection of floats for insecure attachment and obvious defects, this AD requires a specific inspection of the wire pull fittings. Also, while an operator may incorporate into its maintenance program the inspections in the advisory circulars and manufacturer maintenance manuals referenced by the commenter, not all operators are required to do so. In order for these inspections to become mandatory, and to correct the unsafe conditions identified in the NPRM, the FAA must issue an AD. The compliance times as proposed should allow the inspections to be conducted concurrently with scheduled maintenance, thereby minimizing the costs on operators.

The FAA did not change this AD based on this comment.

Changes to the Final Rule

The FAA has revised the applicability of this AD to include airplanes with fitting part number VALTBS1244-3 or VALTBS1244-4, to clarify that replacing the fittings is not terminating action for the repetitive inspections in the AD. The FAA also made some minor editorial changes.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously. The FAA has determined that these minor changes:

- Are consistent with the proposal in the NPRM for correcting the unsafe condition; and
- Do not increase any burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

The FAA reviewed Viking DHC-2 Beaver Service Bulletin No. V2/003, Revision NC, dated November 28, 2012, for Model DCH-2 Mk. I airplanes; and Viking DHC-2T Beaver Service Bulletin No. V2/002, Revision A, dated September 12, 2011, for Model DCH-2 Mk. III airplanes. This service information contains procedures for replacing the forward and aft float strut wire pull fittings and specifies implementing repetitive visual inspections of the fittings. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the MCAI

The MCAI requires returning cracked fittings to Viking, and this AD does not. The MCAI also prohibits installing an affected wire pull fitting on any airplane, and this AD does not.

Costs of Compliance

The FAA estimates that this AD will affect 136 products of U.S. registry. The FAA also estimates that replacing the fittings will take about 12 work-hours at an average labor rate of \$85 per work-hour and required parts will cost about \$2,741. Based on these figures, the FAA estimates a cost of \$3,761 per airplane and \$511,496 for the U.S. operator fleet.

Inspecting the fittings will take about .5 work-hour for an estimated cost of \$42.50 per airplane and \$5,780 for the U.S. fleet, per inspection cycle.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2020-16-15 **Viking Air Limited:** Amendment 39-21199; Docket No. FAA-2019-0045; Product Identifier 2018-CE-027-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Viking Air Limited airplanes, certificated in any category:

(1) Model DHC-2 Mk. I airplanes altered by Supplemental Type Certificate (STC) SA92-63 or SA00299NY with a float strut wire pull fitting part number (P/N) VALTBS1245-1, P/N VALTBS1245-2, P/N VALTBS1244-1, P/N VALTBS1244-3, or P/N VALTBS1244-4; and

(2) Model DHC-2 Mk. III airplanes altered by STC SA91-18 or SA945NE with a float strut wire pull fitting P/N VALTBS1245-1, P/N VALTBS1245-2, P/N VALTBS1244-1, P/N VALTBS1244-3, or P/N VALTBS1244-4.

(d) Subject

Air Transport Association of America (ATA) Code 53: Fuselage.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks reported on the forward and aft float strut wire pull fittings. The FAA is issuing this AD to prevent failure of the wire pull fittings, which could reduce the strength of the float undercarriage below the required structural capability, resulting in a failure of the undercarriage causing the airplane to tip over and submerge.

(f) Actions and Compliance

Unless already done, do the following actions.

(1) Within 90 days after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD):

(i) Replace each forward wire pull fitting P/N VALTBS1245-1 and P/N VALTBS1245-2 with P/N VALTBS1245-3 Left Hand (LH) or P/N VALTBS1245-4 Right Hand (RH) by following the Accomplishment Instructions, paragraphs A.1. through A.8., of Viking DHC-2 Beaver Service Bulletin No. V2/003, Revision NC, dated November 28, 2012 (Viking SB No. V2/003); or Viking DHC-2T Beaver Service Bulletin No. V2/002, Revision A, dated September 12, 2011 (Viking SB No. V2/002, Revision A), as applicable to your model airplane.

(ii) Within 110 hours time-in-service (TIS) after the replacement of the forward wire pull fittings and thereafter at intervals not to exceed 110 hours TIS, visually inspect each forward wire pull fitting for corrosion and cracks. If there is any corrosion or a crack, before further flight, replace the fitting with fitting P/N VALTBS1245-3 (LH) or P/N VALTBS1245-4 (RH).

(2) Within 180 days after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD):

(i) Replace each aft wire pull fitting P/N VALTBS1244-1 with P/N VALTBS1244-3 (LH) or P/N VALTBS1244-4 (RH) by following the Accomplishment Instructions, paragraphs B.1. through B.8., of Viking SB No. V2/003 or Viking SB No. V2/002, Revision A, as applicable to your model airplane.

(ii) Within 110 hours TIS after the replacement of the aft wire pull fittings and thereafter at intervals not to exceed 110 hours TIS, visually inspect each aft wire pull fitting for corrosion and cracks. If there is any corrosion or a crack, before further flight, replace the fitting with fitting P/N VALTBS1244-3 (LH) or P/N VALTBS1244-4 (RH).

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Small Airplane Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: (516) 287-7329; fax: (516) 794-5531; email: . Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) Related Information

Refer to MCAI Transport Canada AD Number CF-2018-10, dated April 18, 2018, for related information. The MCAI can be found in the AD docket on the internet at: <https://www.regulations.gov/docket?D=FAA-2019-0045>.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Viking DHC-2 Beaver Service Bulletin No. V2/003, Revision NC, dated November 28, 2012.

(ii) Viking DHC-2T Beaver Service Bulletin No. V2/002, Revision A, dated September 12, 2011.

(3) For service information identified in this AD, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; telephone: (North America) (800) 663-8444; fax: (250) 656-0673; email: technical.support@vikingair.com; internet: <https://www.vikingair.com/support/service-bulletins>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. In addition, you can access this service information on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0045.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on August 4, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service

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